

Watershed Boundary Dataset (WBD) Data Model (v2.3)

National Hydrography Dataset (NHD)

June 1, 2020

WBDv2.3 Model Changes

GNIS_ID field removed from all Hydrologic Units (HU) feature classes.
All other data model updates highlighted in diagram:

New element Update Delete

Catalog View

Geodatabase

Feature dataset

WBD

Polygon feature class

NonContributingDrainageArea

Line feature class

NonContributingDrainageLine

Polygon feature class

NWISDrainageArea

Line feature class

NWISDrainageLine

Line feature class

WBDLine

Polygon feature class

WBDHU2

Polygon feature class

WBDHU4

Polygon feature class

WBDHU6

Polygon feature class

WBDHU8

Polygon feature class

WBDHU10

Polygon feature class

WBDHU12

Polygon feature class

WBDHU14

Polygon feature class

WBDHU16

Object table

HUMod

Object table

MetaProcessDetail

Relationship

MetaProcessHasMetaSource

Object table

MetaSourceDetail

Object table

FeatureToMeta

Relationship

MetaProcessToFeature

Object table

External Crosswalk

Object table

ProcessingParameters

Object table

UpdateStatus

Object table

Hydrologic Units (HU) Feature Classes

Field name	Data type	Allow nulls	Default value	Domain	Prec	Scale	Length
OBJECTID	Object ID						
Shape	Geometry	Yes					
TMND	String	Yes					40
MetaSourceID	String	Yes					40
SourceDataDesc	String	Yes					100
SourceOriginator	String	Yes					130
SourceFeatureID	String	Yes					40
LoadDate	Date	Yes				0	8
AreaSqKm	Double	Yes				0	0
AreaAcres	Double	Yes				0	0
ReferenceGNIS_IDs	String	Yes					50
Name	String	Yes					120
States	String	Yes					5
HUC2	String	Yes					2
Shape_Length	Double	Yes				0	0
Shape_Area	Double	Yes				0	0

Field name	Data type	Allow nulls	Default value	Domain	Prec	Scale	Length
OBJECTID	Object ID						
Shape	Geometry	Yes					
TMND	String	Yes					40
MetaSourceID	String	Yes					40
SourceDataDesc	String	Yes					100
SourceOriginator	String	Yes					130
SourceFeatureID	String	Yes					40
LoadDate	Date	Yes				0	8
AreaSqKm	Double	Yes				0	0
AreaAcres	Double	Yes				0	0
ReferenceGNIS_IDs	String	Yes					50
Name	String	Yes					120
States	String	Yes					5
HUC2	String	Yes					2
Shape_Length	Double	Yes				0	0
Shape_Area	Double	Yes				0	0

Field name	Data type	Allow nulls	Default value	Domain	Prec	Scale	Length
OBJECTID	Object ID						
Shape	Geometry	Yes					
TMND	String	Yes					40
MetaSourceID	String	Yes					40
SourceDataDesc	String	Yes					100
SourceOriginator	String	Yes					130
SourceFeatureID	String	Yes					40
LoadDate	Date	Yes				0	8
AreaSqKm	Double	Yes				0	0
AreaAcres	Double	Yes				0	0
ReferenceGNIS_IDs	String	Yes					50
Name	String	Yes					120
States	String	Yes					5
HUC2	String	Yes					2
Shape_Length	Double	Yes				0	0
Shape_Area	Double	Yes				0	0

Field name	Data type	Allow nulls	Default value	Domain	Prec	Scale	Length
OBJECTID	Object ID						
Shape	Geometry	Yes					
TMND	String	Yes					40
MetaSourceID	String	Yes					40
SourceDataDesc	String	Yes					100
SourceOriginator	String	Yes					130
SourceFeatureID	String	Yes					40
LoadDate	Date	Yes				0	8
AreaSqKm	Double	Yes				0	0
AreaAcres	Double	Yes				0	0
ReferenceGNIS_IDs	String	Yes					50
Name	String	Yes					120
States	String	Yes					5
HUC4	String	Yes					4
Shape_Length	Double	Yes				0	0
Shape_Area	Double	Yes				0	0

Field name	Data type	Allow nulls	Default value	Domain	Prec	Scale	Length
OBJECTID	Object ID						
Shape	Geometry	Yes					
TMND	String	Yes					40
MetaSourceID	String	Yes					40
SourceDataDesc	String	Yes					100
SourceOriginator	String	Yes					130
SourceFeatureID	String	Yes					40
LoadDate	Date	Yes				0	8
AreaSqKm	Double	Yes				0	0
AreaAcres	Double	Yes				0	0
ReferenceGNIS_IDs	String	Yes					50
Name	String	Yes					120
States	String	Yes					5
HUC2	String	Yes					2
Shape_Length	Double	Yes				0	0
Shape_Area	Double	Yes				0	0

Field name	Data type	Allow nulls	Default value	Domain	Prec	Scale	Length
OBJECTID	Object ID						
Shape	Geometry	Yes					
TMND	String	Yes					40
MetaSourceID	String	Yes					40
SourceDataDesc	String	Yes					100
SourceOriginator	String	Yes					130
SourceFeatureID	String	Yes					40
LoadDate	Date	Yes				0	8
AreaSqKm	Double	Yes				0	0
AreaAcres	Double	Yes				0	0
ReferenceGNIS_IDs	String	Yes					50
Name	String	Yes					120
States	String	Yes					5
HUC2	String	Yes					2
Shape_Length	Double	Yes				0	0
Shape_Area	Double	Yes				0	0

Field name	Data type	Allow nulls	Default value	Domain	Prec	Scale	Length
OBJECTID	Object ID						
Shape	Geometry	Yes					
TMND	String	Yes					40
MetaSourceID	String	Yes					40
SourceDataDesc	String	Yes					100
SourceOriginator	String	Yes					130
SourceFeatureID	String	Yes					40
LoadDate	Date	Yes				0	8
AreaSqKm	Double	Yes				0	0
AreaAcres	Double	Yes				0	0
ReferenceGNIS_IDs	String	Yes					50
Name	String	Yes					120
States	String	Yes					5
HUC3	String	Yes					6
Shape_Length	Double	Yes				0	0
Shape_Area	Double	Yes				0	0

Field name	Data type	Allow nulls	Default value	Domain	Prec	Scale	Length
OBJECTID	Object ID						
Shape	Geometry	Yes					
TMND	String	Yes					40
MetaSourceID	String	Yes					40
SourceDataDesc	String	Yes					100
SourceOriginator	String	Yes					130
SourceFeatureID	String	Yes					40
LoadDate	Date	Yes				0	8
AreaSqKm	Double	Yes				0	0
AreaAcres	Double	Yes				0	0
ReferenceGNIS_IDs	String	Yes					50
Name	String	Yes					120
States	String	Yes					5
HUC2	String	Yes					2
Shape_Length	Double	Yes				0	0
Shape_Area	Double	Yes				0	0

Field name	Data type	Allow nulls	Default value	Domain	Prec	Scale	Length
OBJECTID	Object ID						
Shape	Geometry	Yes					
TMND	String	Yes					40
MetaSourceID	String	Yes					40
SourceDataDesc	String	Yes					100
SourceOriginator	String	Yes					130
SourceFeatureID	String	Yes					40
LoadDate	Date	Yes				0	8
AreaSqKm	Double	Yes				0	0
AreaAcres	Double	Yes				0	0
ReferenceGNIS_IDs	String	Yes					50
Name	String	Yes					120
States	String	Yes					5
HUC2	String	Yes					2
Shape_Length	Double	Yes				0	0
Shape_Area	Double	Yes				0	0

USGS National Water Information System (NWIS)

Field name	Data type	Allow nulls	Default value	Domain	Prec	Scale	Length
OBJECTID	Object ID						
Shape	Geometry	Yes					
TMND	String	Yes					40
MetaSourceID	String	Yes					40
SourceDataDesc	String	Yes					100
SourceOriginator	String	Yes					130
SourceFeatureID	String	Yes					40
LoadDate	Date	Yes				0	8
AreaSqKm	Double	Yes				0	0
AreaAcres	Double	Yes				0	0
ReferenceGNIS_IDs	String	Yes					50
Name	String	Yes					120
States	String	Yes					5
StationName	String	Yes					15
TotalAreaSqKm	Double	Yes				0	0
NWISContributingAreaSqKm	Double	Yes				0	0
ContributingAreaSqKm	Double	Yes				0	0
NWISContributingAreaSqM	Double	Yes				0	0
ReferenceTMNDNHDPointEvent	String	Yes					40
Remarks	String	Yes					250
SHAPE_Length	Double	Yes				0	0
SHAPE_Area	Double	Yes				0	0

Field name	Data type	Allow nulls	Default value	Domain	Prec	Scale	Length
OBJECTID	Object ID						
Shape	Geometry	Yes					
TMND	String	Yes					40
MetaSourceID	String	Yes					40
SourceDataDesc	String	Yes					100
SourceOriginator	String	Yes					130
SourceFeatureID	String	Yes					40
LoadDate	Date	Yes				0	8
AreaSqKm	Double	Yes				0	0
NonContributingAreaSqM	Double	Yes				0	0
Remarks	String	Yes					250
SHAPE_Length	Double	Yes				0	0
SHAPE_Area	Double	Yes				0	0

Simple feature class					Geometry		Polyline	
NonContributingDrainageLine					Meters		No	
					Centimeters		No	
Field name	Data type	Nulls	Default value	Domain	Prec	Scale	Length	
OBJECTID	Object ID							
Shape	Geometry							
TNAME	String	Yes					40	
MetaSourceID	String	Yes					40	
SourceDataDesc	String	Yes					100	
SourceCntrbgnr	String	Yes					130	
SourceFeatureID	String	Yes					40	
Elevation	Double				0	0	8	
LengthKm	Double	Yes			0	0		
LineName	String	Yes					75	
Shape_Length	Double				0	0		